BioMap and Living Waters

Guiding Land Conservation for Biodiversity in Massachusetts

Core Habitats of Great Barrington

This report and associated map provide information about important sites for biodiversity conservation in your area.

This information is intended for conservation planning, and is not intended for use in state regulations.

Produced by:

Natural Heritage & Endangered Species Program
Massachusetts Division of Fisheries and Wildlife
Executive Office of Environmental Affairs
Commonwealth of Massachusetts

Produced in 2004

BioMap and Living Waters:
Guiding Land Conservation for Biodiversity in Massachusetts

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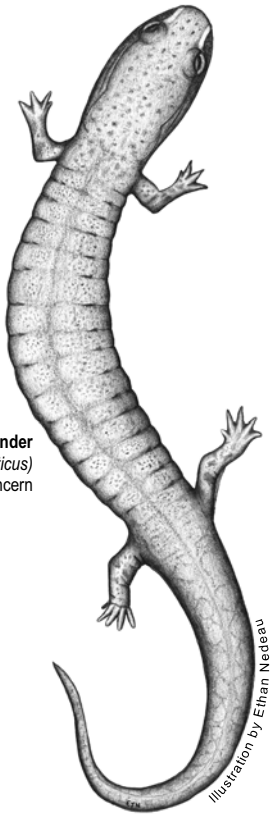
* Depending on the location of Core Habitats, your city or town may not have all of these sections.



Spring Salamander
(Gyrinophilus porphyriticus)
Species of Special Concern

Funding for this project was made available by the Executive Office of Environmental Affairs, contributions to the Natural Heritage & Endangered Species Fund, and through the State Wildlife Grants Program of the US Fish & Wildlife Service.

Natural Heritage & Endangered Species Program

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For more information on rare species and natural communities, please see our fact sheets online at ***www.nhesp.org***

BioMap and Living Waters:
Guiding Land Conservation for Biodiversity in Massachusetts

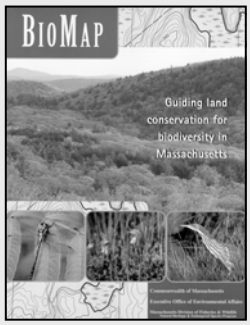
Introduction

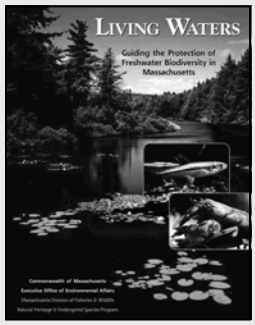
In this report, the Natural Heritage & Endangered Species Program provides you with site-specific biodiversity information for your area. Protecting our biodiversity today will help ensure the full variety of species and natural communities that comprise our native flora and fauna will persist for generatons to come.

The information in this report is the result of two statewide biodiversity conservation planning projects, ***BioMap*** and ***Living Waters***. The goal of the BioMap project, completed in 2001, was to identify and delineate the most important areas for the long-term viability of terrestrial, wetland, and estuarine elements of biodiversity in Massachusetts. The goal of the Living Waters project, completed in 2003, was to identify and delineate the rivers, streams, lakes, and ponds that are important for freshwater biodiversity in the Commonwealth. These two conservation plans are based on documented observations of rare species, natural communities, and exemplary habitats.

What is a Core Habitat?

Both BioMap and Living Waters delineate ***Core Habitats*** that identify the most critical sites for biodiversity conservation across the state. Core Habitats represent habitat for the state's most viable rare plant and animal populations and include exemplary natural communities and aquatic habitats. Core Habitats represent a wide diversity of rare species and natural communities (see Table 1), and these areas are also thought to contain virtually all of the other described species in Massachusetts. Statewide, BioMap Core Habitats encompass 1,380,000 acres of uplands and wetlands, and Living Waters identifies 429 Core Habitats in rivers, streams, lakes, and ponds.





Get your copy of the ***BioMap*** and ***Living Waters*** reports! Contact Natural Heritage at 508-792-7270, Ext. 200 or email natural.heritage@state.ma.us. Posters and detailed technical reports are also available.

Core Habitats and Land Conservation

One of the most effective ways to protect biodiversity for future generations is to protect Core Habitats from adverse human impacts through land conservation. For Living Waters Core Habitats, protection efforts should focus on the ***riparian areas***, the areas of land adjacent to water bodies. A naturally vegetated buffer that extends 330 feet (100 meters) from the water's edge helps to maintain cooler water temperature and to maintain the nutrients, energy, and natural flow of water needed by freshwater species.

In Support of Core Habitats

To further ensure the protection of Core Habitats and Massachusetts' biodiversity in the long-term, the BioMap and Living Waters projects identify two additional areas that help support Core Habitats.

In BioMap, areas shown as ***Supporting Natural Landscape*** provide buffers around the Core Habitats, connectivity between Core Habitats, sufficient space for ecosystems to function, and contiguous undeveloped habitat for common species. Supporting Natural Landscape was

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generated using a Geographic Information Systems (GIS) model, and its exact boundaries are less important than the general areas that it identifies. Supporting Natural Landscape represents potential land protection priorities once Core Habitat protection has been addressed.

In Living Waters, ***Critical Supporting Watersheds*** highlight the immediate portion of the watershed that sustains, or possibly degrades, each freshwater Core Habitat. These areas were also identified using a GIS model. Critical Supporting Watersheds represent developed and undeveloped lands, and can be quite large. Critical Supporting Watersheds can be helpful in land-use planning, and while they are not shown on these maps, they can be viewed in the Living Waters report or downloaded from www.mass.gov/mgis.

Understanding Core Habitat Species, Community, and Habitat Lists

What's in the List?

Included in this report is a list of the species, natural communities, and/or aquatic habitats for each Core Habitat in your city or town. The lists are organized by Core Habitat number.

For the larger Core Habitats that span more than one town, the species and community lists refer to the entire Core Habitat, not just the portion that falls within your city or town. For a list of all the state-listed rare species within your city or town's boundary, whether or not they are in Core Habitat, please see the town rare species lists available at www.nhesp.org.

The list of species and communities within a Core Habitat contains only the species and natural communities that were explicitly included in a given BioMap or Living Waters Core Habitat. Other rare species or examples of other natural communities may fall within the Core Habitat, but for various reasons are not included in the list. For instance, there are a few rare species that are omitted from the list or summary because of their particular sensitivity to the threat of collection. Likewise, the content of many very small Core Habitats are not described in this report or list, often because they contain a single location of a rare plant

Table 1. The number of rare species and types of natural communities explicitly included in the BioMap and Living Waters conservation plans, relative to the total number of native species statewide.

BioMap

	Species and Verified Natural Community Types	
Biodiversity Group	**Included in BioMap**	**Total Statewide**
Vascular Plants	246	1,538
Birds	21	221 breeding species
Reptiles	11	25
Amphibians	6	21
Mammals	4	85
Moths and Butterflies	52	An estimated 2,500 to 3,000
Damselflies and Dragonflies	25	An estimated 165
Beetles	10	An estimated 2,500 to 4,000
Natural Communities	92	> 105 community types

Living Waters

	Species	
Biodiversity Group	**Included in Living Waters**	**Total Statewide**
Aquatic Vascular Plants	23	114
Fishes	11	57
Mussels	7	12
Aquatic Invertebrates	23	An estimated > 2500

species. Some Core Habitats were created for suites of common species, such as forest birds, which are particularly threatened by habitat fragmentation. In these cases, the individual common species are not listed.

What does 'Status' mean?

The Division of Fisheries and Wildlife determines a status category for each rare species listed under the Massachusetts Endangered Species Act, M.G.L. c.131A, and its implementing regulations, 321 CMR 10.00. Rare species are categorized as Endangered, Threatened, or of Special Concern according to the following:

- ***Endangered*** species are in danger of extinction throughout all or a significant portion of their range or are in danger of extirpation from Massachusetts.
- ***Threatened*** species are likely to become Endangered in Massachusetts in the foreseeable future throughout all or a significant portion of their range.
- ***Special Concern*** species have suffered a decline that could threaten the species if allowed to continue unchecked or occur in such small numbers or with such restricted distribution or specialized habitat requirements that they could easily become Threatened in Massachusetts.

In addition, the Natural Heritage & Endangered Species Program maintains an unofficial ***watch list*** of plants that are tracked due to potential conservation interest or concern, but are not regulated under the Massachusetts Endangered Species Act or other laws or regulations. Likewise, described natural communities are not regulated any laws or regulations, but they can help to identify ecologically important areas that are worthy of protection. The status of natural communities reflects the documented number and acreages of each community type in the state:

- ***Critically Imperiled*** communities typically have 5 or fewer documented sites or have very few remaining acres in the state.
- ***Imperiled*** communities typically have 6-20 sites or few remaining acres in the state.
- ***Vulnerable*** communities typically have 21-100 sites or limited acreage across the state.
- ***Secure*** communities typically have over 100 sites or abundant acreage across the state; however excellent examples are identified as Core Habitat to ensure continued protection.

Legal Protection of Biodiversity

BioMap and Living Waters present a powerful vision of what Massachusetts would look like with full protection of the land that supports most of our biodiversity. To create this vision, some populations of state-listed rare species were deemed more likely to survive over the long-term than others.

Regardless of their potential viability, all sites of state-listed species have full legal protection under the Massachusetts Endangered Species Act (M.G.L. c.131A) and its implementing regulations (321 CMR 10.00). Habitat of state-listed wildlife is also protected under the Wetlands Protection Act Regulations (310 CMR 10.37 and 10.59). The ***Massachusetts Natural Heritage Atlas*** shows **Priority Habitats**, which are used for regulation under the Massachusetts Endangered Species Act and Massachusetts Environmental Policy Act (M.G.L. c.30) and **Estimated Habitats**, which are used for regulation of rare wildlife habitat under the Wetlands Protection Act. For more information on rare species regulations, see the *Massachusetts Natural Heritage Atlas*, available from the Natural Heritage & Endangered Species Program in book and CD formats.

BioMap and Living Waters are conservation planning tools and do not, in any way, supplant the Estimated and Priority Habitat Maps which have regulatory significance. Unless and until the combined BioMap and Living Waters vision is fully realized, we must continue to protect all populations of our state-listed species and their habitats through environmental regulation.

Natural Heritage & Endangered Species Program

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Understanding Core Habitat Summaries

Following the BioMap and Living Waters Core Habitat species and community lists, there is a descriptive summary of each Core Habitat that occurs in your city or town. This summary highlights some of the outstanding characteristics of each Core Habitat, and will help you learn more about your city or town's biodiversity. You can find out more information about many of these species and natural communities by looking at specific ***fact sheets*** at www.nhesp.org.

Next Steps

BioMap and Living Waters were created in part to help cities and towns prioritize their land protection efforts. While there are many reasons to conserve land – drinking water protection, recreation, agriculture, aesthetics, and others – BioMap and Living Waters Core Habitats are especially helpful to municipalities seeking to protect the rare species, natural communities, and overall biodiversity within their boundaries. Please use this report and map along with the rare species and community fact sheets to appreciate and understand the biological treasures in your city or town.

Protecting Larger Core Habitats

Core Habitats vary considerably in size. For example, the average BioMap Core Habitat is 800 acres, but Core Habitats can range from less than 10 acres to greater than 100,000 acres. These larger areas reflect the amount of land needed by some animal species for breeding, feeding, nesting, overwintering, and long-term survival. Protecting areas of this size can be very challenging, and requires developing partnerships with neighboring towns.

Prioritizing the protection of certain areas within larger Core Habitats can be accomplished through further consultation with Natural Heritage Program biologists, and through additional field research to identify the most important areas of the Core Habitat.

Additional Information

If you have any questions about this report, or if you need help protecting land for biodiversity in your community, the Natural Heritage & Endangered Species Program staff looks forward to working with you.

Contact the Natural Heritage & Endangered Species Program:

by Phone *508-792-7270, Ext. 200*

by Fax: *508-792-7821*

by Email: *natural.heritage@state.ma.us*.

by Mail: *North Drive*
Westborough, MA 01581

The GIS datalayers of BioMap and Living Waters Core Habitats are available for download from MassGIS: www.mass.gov/mgis

Check out www.nhesp.org for information on:

- Rare species in your town
- Rare species fact sheets
- BioMap and Living Waters projects
- Natural Heritage publications, including:
  - Field guides
  - Natural Heritage Atlas, and more!

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BioMap: Species and Natural Communities

Great Barrington

Core Habitat BM759

Natural Communities

Common Name	Scientific Name	Status
Transitional Floodplain Forest		Imperiled

Plants

Common Name	Scientific Name	Status
Arborvitae	*Thuja occidentalis*	Endangered
Downy Wood-Mint	*Blephilia ciliata*	Endangered
Green Dragon	*Arisaema dracontium*	Threatened
Hairy Wood-Mint	*Blephilia hirsuta*	Endangered
Labrador Bedstraw	*Galium labradoricum*	Threatened
Long-Leaved Bluet	*Houstonia longifolia var longifolia*	Endangered
Long-Styled Sanicle	*Sanicula odorata*	Threatened
Schweinitz's Sedge	*Carex schweinitzii*	Endangered
Woodland Millet	*Milium effusum*	Threatened

Vertebrates

Common Name	Scientific Name	Status
Bat Hibernaculum		----------
Jefferson Salamander	*Ambystoma jeffersonianum*	Special Concern
Wood Turtle	*Clemmys insculpta*	Special Concern

Core Habitat BM798

Natural Communities

Common Name	Scientific Name	Status
Black Ash-Red Maple-Tamarack Calcareous Seepage Swamp		Imperiled
Calcareous Basin Fen		Critically Imperiled

Plants

Common Name	Scientific Name	Status
Hemlock Parsley	*Conioselinum chinense*	Special Concern
Intermediate Spike-Sedge	*Eleocharis intermedia*	Threatened
Sensitive Rare Plant		
Swamp Birch	*Betula pumila*	Endangered
White Adder's-Mouth	*Malaxis monophyllos var brachypoda*	Endangered

Vertebrates

Common Name	Scientific Name	Status
Spring Salamander	*Gyrinophilus porphyriticus*	Special Concern
Wood Turtle	*Clemmys insculpta*	Special Concern

Core Habitat BM811

Natural Communities

Common Name	Scientific Name	Status
Calcareous Forest Seep Community		Imperiled
Calcareous Seepage Marsh		Imperiled
Calcareous Sloping Fen		Imperiled
Deep Emergent Marsh		Secure
High-Terrace Floodplain Forest		Imperiled
Low-Energy Riverbank		Secure
Major-River Floodplain Forest		Imperiled
Mud Flat		Secure
Rich, Mesic Forest Community		Vulnerable
Shallow Emergent Marsh		Secure
Shrub Swamp		Secure
Small-River Floodplain Forest		Imperiled
Wet Meadow		Secure

Plants

Common Name	Scientific Name	Status
Andrews' Bottle Gentian	*Gentiana andrewsii*	Endangered
Fen Sedge	*Carex tetanica*	Special Concern
Intermediate Spike-Sedge	*Eleocharis intermedia*	Threatened
Long-Styled Sanicle	*Sanicula odorata*	Threatened
Pale Green Orchis	*Platanthera flava var herbiola*	Threatened

Invertebrates

Common Name	Scientific Name	Status
Williams' Tigermoth	*Grammia williamsii*	Watch Listed

Vertebrates

Common Name	Scientific Name	Status
Spring Salamander	*Gyrinophilus porphyriticus*	Special Concern
Wood Turtle	*Clemmys insculpta*	Special Concern

Core Habitat BM813

Natural Communities

Common Name	Scientific Name	Status
Circumneutral Talus Forest/Woodland		Vulnerable
Ridgetop Pitch Pine - Scrub Oak Community		Imperiled

Plants

Common Name	Scientific Name	Status
Arborvitae	*Thuja occidentalis*	Endangered
Climbing Fumitory	*Adlumia fungosa*	Threatened
Long-Styled Sanicle	*Sanicula odorata*	Threatened
Mountain Spleenwort	*Asplenium montanum*	Endangered
Purple Clematis	*Clematis occidentalis*	Special Concern

Sessile Water-Speedwell	*Veronica catenata*	Endangered

Vertebrates

Common Name	Scientific Name	Status
Sensitive Rare Vertebrate		

Core Habitat BM820

Vertebrates

Common Name	Scientific Name	Status
Spring Salamander	*Gyrinophilus porphyriticus*	Special Concern

Core Habitat BM855

Natural Communities

Common Name	Scientific Name	Status
Acidic Shrub Fen		Vulnerable
Black Ash-Red Maple-Tamarack Calcareous Seepage Swamp		Imperiled
Calcareous Pondshore/Lakeshore		Imperiled
Calcareous Rock Cliff Community		Vulnerable
Calcareous Sloping Fen		Imperiled
Hemlock-Hardwood Swamp		Secure
Hickory - Hop Hornbeam Forest/Woodland		Imperiled
Major-River Floodplain Forest		Imperiled
Northern Hardwoods - Hemlock - White Pine Forest		Secure
Shallow Emergent Marsh		Secure
Shrub Swamp		Secure
Transitional Floodplain Forest		Imperiled
Yellow Oak Dry Calcareous Forest		Imperiled

BioMap: Species and Natural Communities

Great Barrington

Plants

Common Name	Scientific Name	Status
A Filmy-Fern	*Trichomanes intricatum*	Endangered
Allegheny Buttercup	*Ranunculus allegheniensis*	Watch Listed
Andrews' Bottle Gentian	*Gentiana andrewsii*	Endangered
Autumn Coralroot	*Corallorhiza odontorhiza*	Special Concern
Barren Strawberry	*Waldsteinia fragarioides*	Special Concern
Black Cohosh	*Cimicifuga racemosa*	Endangered
Bristly Buttercup	*Ranunculus pensylvanicus*	Threatened
Crooked-Stem Aster	*Symphotrichum prenanthoides*	Threatened
Culver's-Root	*Veronicastrum virginicum*	Threatened
Davis's Sedge	*Carex davisii*	Endangered
Dioecious Sedge	*Carex sterilis*	Threatened
Downy Arrowwood	*Viburnum rafinesquianum*	Endangered
Drooping Speargrass	*Poa languida*	Endangered
False Pennyroyal	*Trichostema brachiatum*	Endangered
Fen Cuckoo Flower	*Cardamine pratensis var palustris*	Threatened
Fen Sedge	*Carex tetanica*	Special Concern
Foxtail Sedge	*Carex alopecoidea*	Threatened
Frank's Lovegrass	*Eragrostis frankii*	Special Concern
Gattinger's Panic-Grass	*Panicum gattingeri*	Special Concern
Gray's Sedge	*Carex grayi*	Threatened
Great Blue Lobelia	*Lobelia siphilitica*	Endangered
Green Dragon	*Arisaema dracontium*	Threatened
Hairy Agrimony	*Agrimonia pubescens*	Threatened
Hairy Beardtongue	*Penstemon hirsutus*	Endangered
Hairy Wild Rye	*Elymus villosus*	Endangered
Hairy Wood-Mint	*Blephilia hirsuta*	Endangered

Hemlock Parsley	*Conioselinum chinense*	Special Concern
Intermediate Spike-Sedge	*Eleocharis intermedia*	Threatened
Labrador Bedstraw	*Galium labradoricum*	Threatened
Long-Styled Sanicle	*Sanicula odorata*	Threatened
Lyre-Leaved Rock-Cress	*Arabis lyrata*	Endangered
Mossy-Cup Oak	*Quercus macrocarpa*	Special Concern
Narrow-Leaved Spring Beauty	*Claytonia virginica*	Endangered
Narrow-Leaved Vervain	*Verbena simplex*	Endangered
Purple Cress	*Cardamine douglassii*	Endangered
Red Mulberry	*Morus rubra*	Endangered
Sensitive Rare Plant		
Sessile Water-Speedwell	*Veronica catenata*	Endangered
Shining Wedgegrass	*Sphenopholis nitida*	Threatened
Small Dropseed	*Sporobolus neglectus*	Endangered
Small-Flowered Agrimony	*Agrimonia parviflora*	Endangered
Smooth Rock-Cress	*Arabis laevigata*	Threatened
Stiff Gentian	*Gentianella quinquefolia*	Watch Listed
Swamp Birch	*Betula pumila*	Endangered
Sweet Coltsfoot	*Petasites frigidus var palmatus*	Endangered
Tuckerman's Sedge	*Carex tuckermanii*	Endangered
Wapato	*Sagittaria cuneata*	Threatened
Yellow Oak	*Quercus muehlenbergii*	Threatened

Invertebrates

Common Name	Scientific Name	Status
Dion Skipper	*Euphyes dion*	Threatened
Slender Walker	*Pomatiopsis lapidaria*	Endangered

BioMap: Species and Natural Communities

Great Barrington

Vertebrates

Common Name	Scientific Name	Status
Bald Eagle	*Haliaeetus leucocephalus*	Endangered
Eastern Box Turtle	*Terrapene carolina*	Special Concern
Four-toed Salamander	*Hemidactylium scutatum*	Special Concern
Jefferson Salamander	*Ambystoma jeffersonianum*	Special Concern
Spotted Turtle	*Clemmys guttata*	Special Concern
Spring Salamander	*Gyrinophilus porphyriticus*	Special Concern
Wood Turtle	*Clemmys insculpta*	Special Concern

BioMap: Core Habitat Summaries

Great Barrington

Core Habitat BM759

This Core Habitat encompasses riverside and upland habitats along the Williams River and a section of the Housatonic River in Great Barrington. This long stretch of riparian habitat is particularly important for Wood Turtles. Wetland and upland habitats here also support Jefferson Salamanders, overwintering bats, and several important rare plant populations. Included along the shores of the Housatonic River is a good example of the unusual Transitional Floodplain Forest community. The majority of this Core Habitat appears to be unprotected.

Natural Communities

This large Core Habitat contains a good example of a Transitional Floodplain Forest on the shore of the Housatonic River in Great Barrington. Transitional Floodplain Forests are riverside Silver Maple-Green Ash-American Elm forests that experience annual floods. Of the three floodplain forest community types, these communities are intermediate in vegetation and soils. This Core Habitat contains one of only five good-quality Transitional Floodplain Forests known in the state.

Plants

Quite a diversity of rare plant species are found within this Core Habitat, including two Endangered species of wood-mint. Also present is one of the state's most viable populations of the delicate grass, Woodland Millet.

Vertebrates

This Core Habitat provides significant habitat for Wood Turtles and Jefferson Salamanders. Wood Turtle habitat can be found in the nearly 12 contiguous miles of meandering rivers and streams bordered by oxbow wetlands, wet meadows, shrub swamps, upland forests, and fields. Seasonal pools and other small, isolated wetlands surrounded by deciduous or mixed forest provide habitat for Jefferson Salamanders. This Core Habitat also encompasses upland forest surrounding a bat overwintering site, known as a hibernaculum.

BioMap: Core Habitat Summaries

Great Barrington

Core Habitat BM798

This Core Habitat contains riparian and upland habitats along Konkapot Brook and its tributaries, and along a stretch of the Housatonic River in Stockbridge. This is a key site for the protection of Wood Turtles in western Massachusetts. The area also encompasses large calcareous wetland communities that are associated with several rare plant species. Only a small portion of this valuable Core Habitat is currently protected as conservation land.

Natural Communities

This Core Habitat contains an excellent complex of species-rich, nutrient-enriched wetlands. The Black Ash-Red Maple-Tamarack Calcareous Seepage Swamp is one of the largest in the state. Black Ash-Red Maple-Tamarack Calcareous Seepage Swamps are mixed deciduous-coniferous forested swamps occurring in areas where there is calcium-rich groundwater seepage. This nutrient enrichment results in many rare calcium-loving plant species. Also within this Core Habitat, a Calcareous Basin Fen occurs as a ring around Agawam Lake. Calcareous Basin Fens are sedge-shrub peatlands occurring in well-defined basins that have calcareous water inputs. Here the wetland complex is very species-rich and is associated with several state-listed rare plant species.

Plants

A large and vigorous population of Intermediate Spike-Sedge (Threatened) is growing along a pondshore in one part of this Core Habitat. Another area supports rare fen species such as Hemlock Parsley and Swamp Birch.

Vertebrates

Diverse and connected riparian habitats along the meandering Konkapot Brook and its tributaries provide significant habitat for Wood Turtles. Riparian habitats used by Wood Turtles include meandering streams and sand bars, wet meadows, shrub and wooded swamps, upland forests with openings, and old fields. The length and relatively roadless condition of this area suggest that it may be one of the best places in western Massachusetts in which to preserve a viable population of Wood Turtles through habitat protection. Stony Brook and other coldwater, high-gradient brooks flowing into Konkapot Brook off the western slopes of Beartown Mountain likely support significant populations of Spring Salamanders.

BioMap: Core Habitat Summaries

Great Barrington

Core Habitat BM811

This Core Habitat encompasses portions of Hop Brook and its tributaries, as well as a section of the Housatonic River in Lee. It contains a mosaic of old fields, sedge meadows, and shrubby fens. Included are habitats for two rare moths, Wood Turtles, and Spring Salamanders. There are also several natural communities of note, and a diversity of rare plants adapted to the calcareous conditions found here. Portions of the Core Habitat are protected within the Hop Brook Wildlife Management Area, and further protection of the remainder is needed.

Natural Communities

This Core Habitat contains a complex of wetland communities that occur along Hop Brook. The most notable of these is the extensive Deep Emergent Marsh. Deep Emergent Marshes are graminoid wetlands occurring on saturated soils that are seasonally flooded. They generally form in broad, flat areas bordering slow rivers or along pond margins, and often grade into Shrub Swamps. Although invasive exotic species are degrading the community here, it has maintained the characteristic plant species diversity and remains an important area for several wetland birds. Also of note in this Core Habitat is a large Calcareous Forested Seep. Calcareous Forest Seeps are found on wet slopes, where calcium-rich groundwater seeps out of the earth. The overstory is similar to the surrounding forest, but many typical calcareous wetland ferns, shrubs, and other plants occur as well.

Plants

A variety of rare plant species adapted to calcareous soils live within the natural communities contained in this Core Habitat. For example, Andrews' Bottle Gentian, which blooms violet-blue in late summer, and the less conspicuous Fen Sedge can be found in wet meadow communities along Hop Brook.

Invertebrates

The rare moth species, Williams' Tiger Moth, was documented at this site more than 30 years ago, and likely still persists here today.

Vertebrates

This Core Habitat encompasses riparian habitats and adjacent uplands along 2 miles of the Housatonic River and 3 miles of Hop Brook in Lee and Tyringham. These areas provide significant habitat for Wood Turtles, despite being surrounded by roads. Wood Turtles will utilize the long meandering stretches of the Housatonic River and Hop Brook and adjacent wet meadows, shrub swamps, and forested wetlands, upland forests, and old fields. Coldwater, high-gradient brooks at the headwaters of Mad River and a tributary of Hop Brook also provide significant habitat for Spring Salamanders. Although portions of this Core Habitat have been protected as conservation land, large and important areas remain unprotected.

BioMap: Core Habitat Summaries

Great Barrington

Core Habitat BM813

This Core Habitat encompasses the summit and surrounds of Monument Mountain. Habitats here support a variety of rare plants, including vines of the Purple Clematis, as well as rare reptiles. Of note are the communities and habitats along the mountains slopes, including an extensive Circumneutral Talus Forest.

Natural Communities

This summit of Monument Mountain is composed of a small and heavily visited Ridgetop Pitch Pine-Scrub Oak community. The Ridgetop Pitch Pine-Scrub Oak community occurs on acidic bedrock along mountain ridges, often in a mosaic with Acidic Rocky Summit communities. This fire dependant community is tolerant of extremely severe growing conditions. Below this ridgetop community is an extensive Circumneutral Talus Forest. Calcareous Talus Forest communities develop on boulder strewn slopes below certain cliffs, with scattered trees, shrubs, vines, and ferns. There is often a gradient of vegetation density as the slope changes, with more trees on the lower slope. The talus slope here has a wide range of habitats, from open, treeless areas to wooded areas. Both of these communities are well-buffered within a 2300-acre roadless area of natural vegetation.

Plants

Inhabiting large boulders and talus slopes of the Monument Mountain area are viable populations of the rare vines Purple Clematis and Climbing Fumitory. Rich mesic forest portions of this Core Habitat support forest understory rare plants such as the Long-Styled Sanicle.

Vertebrates

This Core Habitat encompasses nearly 3 square miles of roadless upland habitats for a state-protected rare species of reptile. Principal habitats are dry mixed forest, rock outcrops, and talus slopes. Approximately one-third of the area within this Core Habitat is currently protected as conservation land.

Core Habitat BM820

Vertebrates

This Core Habitat encompasses over 10 connected miles of coldwater, high-gradient brooks and headwater seeps that provide habitat for Spring Salamanders in East and West Brooks in Great Barrington and Monterey. This area is almost entirely contained within Beartown State Forest.

BioMap: Core Habitat Summaries

Great Barrington

Core Habitat BM855

This is a large, diverse, and valuable Core Habitat that supports a suite of rare plants and animals, as well as natural communities. It encompasses much of the lower Konkapot and Housatonic Rivers, Schenob Brook, and the Green River, as well as East Mountain. These diverse areas contain a wide variety of wetland, upland, and riparian habitats that support several rare species of vertebrates, from Wood Turtles to Bald Eagles. This area also provides key invertebrate habitats for species such as the Dion Skipper butterfly. The many natural communities here include multiple calcareous wetlands, and these unusual calcareous conditions create plant biodiversity hotspots, with over 100 rare plant populations documented from within the Core Habitat. Some sections of the Core Habitat have been preserved as conservation land, including East Mountain State Forest and important areas in Sheffield. However, many other large and critical areas are currently unprotected.

Natural Communities

This very large Core Habitat contains a great diversity of exemplary natural communities ranging from the Major-River Floodplain Forests of the Housatonic River to patches of Yellow Oak Dry Calcareous Forests on dry hillsides underlain with calcareous rock. Calcareous, or nutrient-rich, rock characterizes many of the natural communities within this Core Habitat. Large, mature, and high-quality Black Ash-Red Maple-Tamarack Calcareous Seepage Swamps occur throughout the wetlands in this Core Habitat. These communities are mixed deciduous-coniferous forested swamps occurring in areas where there is calcium-rich groundwater seepage. The nutrient enrichment results in many rare calcium-loving plant species. Also influenced by nutrient-rich groundwater seepage are the many Calcareous Sloping Fens within this Core Habitat. Calcareous Sloping Fens are open, sedge-dominated wetlands occurring on slight to moderate slopes where there is calcareous groundwater seepage. They are rare species "hot spots" with many associated rare plant and animal species.

Plants

This very large Core Habitat contains an abundance of rare plant species adapted to calcareous soils - over 100 rare plant populations! Exemplary populations within this area include a large and pristine population of Swamp Birch in a calcareous peatland, several highly viable populations of Mossy-Cup Oak in calcareous seepage swamps, a very large occurrence of Foxtail Sedge in a floodplain meadow, and the state's largest populations of Autumn Coralroot and Drooping Speargrass.

Invertebrates

In southwestern Sheffield, this Core Habitat includes a pristine area of calcareous fens along the Housatonic River that are habitat for rare invertebrates such as the Dion Skipper butterfly and the Slender Walker snail. Most of this habitat is on conservation land owned by the Nature Conservancy; nevertheless, conservation of the remaining unprotected land in this area is important to increase the amount of contiguous protected habitat and to help ensure the long-term viability of rare species inhabiting the area.

BioMap: Core Habitat Summaries

Great Barrington

Vertebrates

This is a large and complex Core Habitat that supports a diverse array of rare vertebrate species within a variety of wetland, upland, and riparian habitats. The relatively large and connected riparian areas provide significant habitat for Wood Turtles, and this may be one of the best areas in the state in which to focus conservation efforts for this species. Conservation efforts directed at Wood Turtles should seek to protect long corridors of undeveloped, connected habitats that extend at least 600 yards on both sides of streams and rivers.

In addition, the complexes of wet meadows, shrub swamps, wooded swamps, vernal pools, and upland forests provide significant habitat for Spotted Turtles. Several populations of Jefferson Salamanders are present in areas of deciduous and mixed forests with vernal pools. Wetlands and seeps where sphagnum moss is abundant provide significant habitat for Four-toed Salamanders. High-gradient coldwater brooks and headwater seeps on East Mountain also provide habitat for Spring Salamanders.

Portions of the Housatonic River within this Core Habitat, including forested river banks, are used by wintering Bald Eagles.

Living Waters: Species and Habitats

Great Barrington

Core Habitat LW121

Fishes

Common Name	Scientific Name	Status
Bridle Shiner	*Notropis bifrenatus*	Special Concern
Longnose Sucker	*Catostomus catostomus*	Special Concern

Core Habitat LW125

Exemplary Habitats

Common Name	Scientific Name	Status
Lake/Pond Habitat		----------

Fishes

Common Name	Scientific Name	Status
Longnose Sucker	*Catostomus catostomus*	Special Concern

Core Habitat LW244

Plants

Common Name	Scientific Name	Status
Longstem Waterwort	*Elatine triandra*	Watch Listed

Core Habitat LW245

Plants

Common Name	Scientific Name	Status
Water Star-grass	*Heteranthera dubia*	Watch Listed

Core Habitat LW266

Plants

Common Name	Scientific Name	Status
Hill's Pondweed	*Potamogeton hillii*	Special Concern
Lesser Bladderwort	*Utricularia minor*	Watch Listed

Core Habitat LW312

Invertebrates

Common Name	Scientific Name	Status
Creeper	*Strophitus undulatus*	Special Concern
Triangle Floater	*Alasmidonta undulata*	Special Concern

Fishes

Common Name	Scientific Name	Status
Longnose Sucker	*Catostomus catostomus*	Special Concern

Living Waters: Core Habitat Summaries

Great Barrington

Core Habitat LW121

This Core Habitat in Seekonk Brook and its tributaries supports the Longnose Sucker, a fish Species of Special Concern. This species is restricted to the western watersheds of Massachusetts, where it is found in cold, clean, oxygen-rich streams with gravel bottoms. The Longnose Sucker sometimes migrates many miles to reach its spawning grounds. The eggs are released over the gravel bottom, making them susceptible to excess sedimentation, flow alterations, and increases in water temperature. These habitat degradations can be particularly detrimental to the reproductive success of this slow-growing fish that does not reach maturity until 5 to 7 years of age. Protecting the riparian areas adjacent to this Core Habitat will help maintain the cool, clean freshwater habitat of the Longnose Sucker.

The impounded section of Long Pond Brook supports one of nine known populations of Bridle Shiner in the Housatonic Watershed. This fish Species of Special Concern has a small range from southern New England to South Carolina, and has been declining or extirpated in much of the region. The Bridle Shiner is typically found in well-vegetated, quiet waters. It feeds on small aquatic insects and other invertebrates, and is an important part of the freshwater ecosystem as prey for larger fishes.

Core Habitat LW125

This section of the Housatonic River and Mohawk Brook supports the Longnose Sucker, a fish Species of Special Concern. This species is restricted to the western watersheds of Massachusetts, where it is found in cold, clean, oxygen-rich streams with gravel bottoms. The Longnose Sucker sometimes migrates many miles to reach its spawning grounds. The eggs are released over the gravel bottom, making them susceptible to excess sedimentation, flow alterations, and increases in water temperature. These habitat degradations can be particularly detrimental to the reproductive success of this slow-growing fish that does not reach maturity until 5 to 7 years of age. Protecting the riparian areas adjacent to this Core Habitat will help maintain the cool, clean freshwater habitat of the Longnose Sucker.

At the top of the Core Habitat, Mohawk Lake is an undammed pond with higher alkalinity waters, which naturally occur in the western regions of Massachusetts underlain by limestone and marble bedrock. These types of ponds support uncommon plant and invertebrate species not found in other parts of the state. Mohawk Lake has relatively little development in its riparian areas and surrounding watershed.

Core Habitat LW244

Benedict Pond is the only Massachusetts habitat known for an uncommon species of waterwort, a tiny aquatic plant of shallow water.

Core Habitat LW245

Shallow areas of Mansfield Pond support a population of the uncommon Water Star-Grass, which has yellow flowers and long grass-like leaves. Native freshwater plants like the Water Star-Grass are an important component of aquatic ecosystems, providing habitat and nutrition

for fishes and invertebrates, and adding oxygen to the water through photosynthesis.

Core Habitat LW266

Hill's Pondweed, a globally rare plant species, flourishes in the shallow areas of this connected complex of hardwater beaver ponds along Muddy Brook. Native freshwater plants like Hill's Pondweed are an important component of aquatic ecosystems, providing habitat and nutrition for fishes and invertebrates, and adding oxygen to the water through photosynthesis.

Core Habitat LW312

The Housatonic River supports three freshwater mussel species, including the rare Triangle Floater and the rare Creeper mussel. These species gain a foothold in the moderate to quick flowing river in areas of the riverbed with packed sands and gravels or along the river banks that are sheltered from the strong currents.

The section of the Housatonic River straddling Great Barrington and Sheffield and the lower portion of the Green River support the rare Longnose Sucker. This species is restricted to the western watersheds of Massachusetts, where it is found in cold, clean, oxygen-rich streams with gravel bottoms. The Longnose Sucker sometimes migrates many miles to reach its spawning grounds. The eggs are released over the gravel bottom, making them susceptible to excess sedimentation, flow alterations, and increases in water temperature. These habitat degradations can be particularly detrimental to the reproductive success of this slow-growing fish that does not reach maturity until 5 to 7 years of age.

Permanent protection of the undeveloped riparian areas adjacent to this Core Habitat and the control of sediment inputs from nearby development and farm fields are first steps toward protecting this freshwater habitat.

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